PROGRAM MANAGEMENT MISSION IMPOSSIBLE

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Introduction

Your mission, if you choose to accept it, is to take charge of a struggling major Army acquisition program currently in program definition and risk reduction. The project has had serious technical problems, schedule delays, budget changes, and congressional scrutiny. Expect to interface with every major U.S. aerospace contractor while managing nine directorates within your project management office (PMO). Does this sound like an appealing job opportunity? Maybe not, but this is the situation COL Patrick O'Reilly found when he took the Project Manager, Theater High Altitude Area Defense (PM, THAAD) charter in July 1999. This article explores how one PM took a challenged program and turned it around by cultivating a culture of program management best practices. The resulting program's success was recognized when PM, THAAD won the 2000 Army Project Manager of the Year Award. Although THAAD is a large project, the majority of concepts outlined could apply to any program, regardless of size.

PM, THAAD's success cannot be attributed to any single individual or change. Without the clear understanding and steadfast support of the THAAD Deputy PM and Chief Engineer, initiatives to improve THAAD would not have been successful. It was a hard-working team that integrated program management best practices, critical enablers, and motivational leadership to turn the program around. Most important, this turnaround was accomplished without losing sight of the warfighter.

Management Model

The first step in turning the program around started long before the charter changed hands. O'Reilly understood that he had to do his homework upfront if he expected a significant change. He planned to immediately institute a new culture with an intentional "shock effect." First, he had to determine what management model he would leverage to develop a world-class program office. He decided to use a model from *Levers*

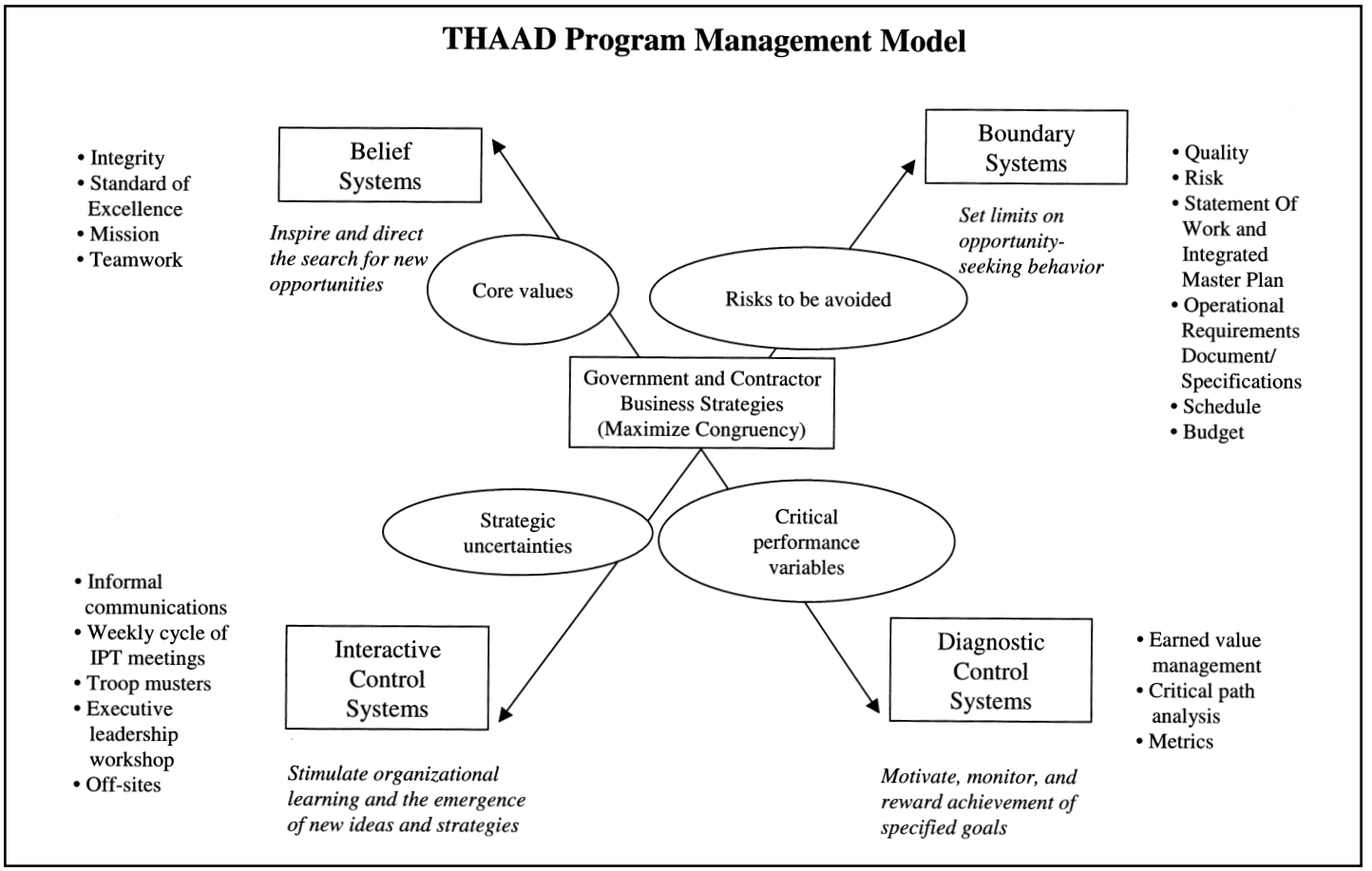

Figure 1.

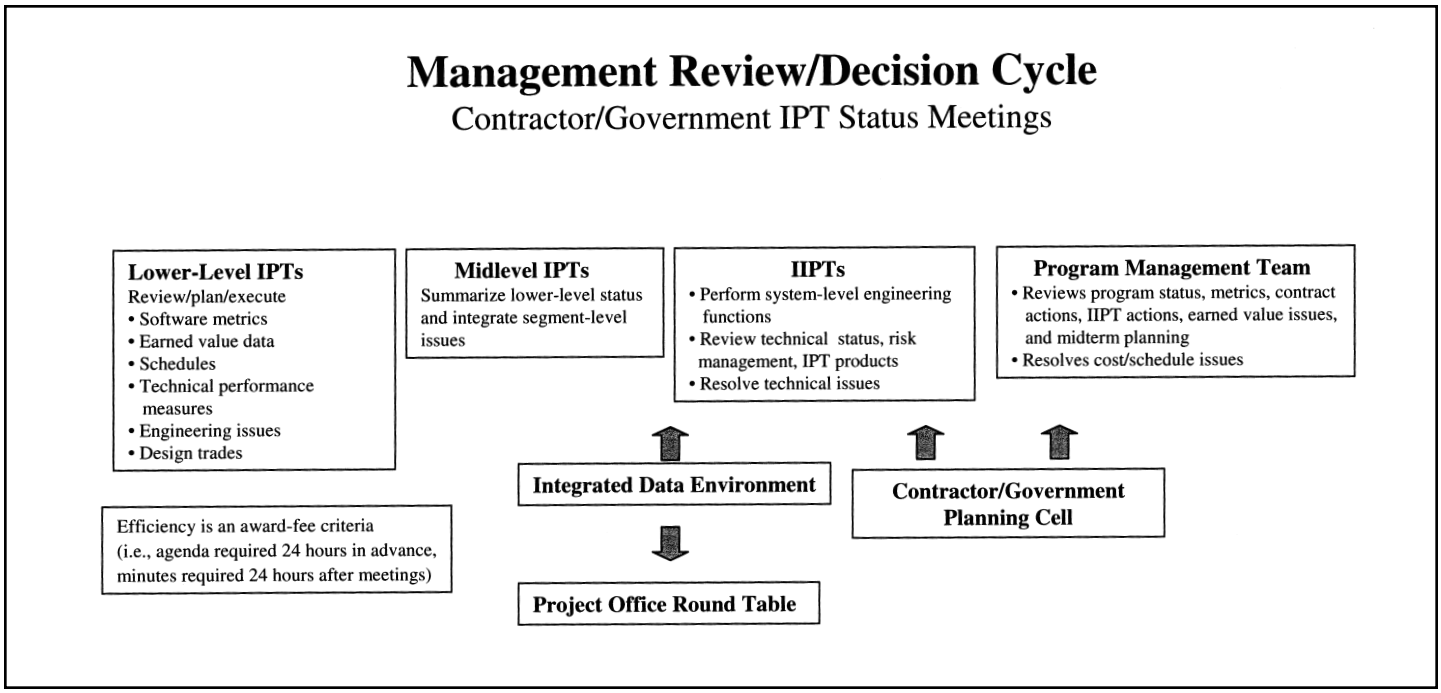

Figure 2.

of Control by Harvard Business School's Robert Simons. The guiding principle of the model was that government and contractor business strategies were the central focus. The goal was maximum congruency. These strategies drove the model's four levers of control: belief systems, boundary systems, interactive control systems, and diagnostic control systems (Figure 1).

Integrating Program Management Culture

Once a management model was identified, it was critical to establish a culture that embraced a variety of new program management best practices. A great deal of effort was expended initially to demonstrate that the PM culture would pay dividends. While being fostered in small groups, change was championed by government and industry senior management. Ultimately, changes took root. Most important, best practices were integrated and strengthened. Some of the innovative best practices and enablers that PM, THAAD successfully integrated are discussed in the following paragraphs.

Extensive Collaboration

The cornerstone of the THAAD management philosophy is extensive collaboration with contractors. This included reorganizing the entire project through a streamlined integrated product team (IPT) structure. This new structure was enabled by a leadership attitude that viewed contractors as partners rather than adversaries.

PM, THAAD has more than 122 IPTs with more than 3,000 participants. IPTs are not workgroups—they are comprised of participants who are empowered to speak for their organizations. By the nature of their business, IPT participants are extremely collaborative and constantly meet to discuss and resolve issues. In some cases, government and contractor personnel were specifically collocated to facilitate information sharing. In fact, one entire product office was moved into the prime contractor's facility to facilitate communication. PM, THAAD discovered that the "water-cooler conversation" and familiarity within IPTs greatly improved the exchange of ideas and, ultimately, the product. The IPT process is kept well-oiled by running quarterly training to "re-green" participants on the principles of IPTs.

Lower level IPTs review, plan, and execute software metrics, earned value data, schedules, and engineering issues. Midlevel IPTs summarize lower level status and integrate segment-level issues. Integrating IPTs (IIPTs) perform the system-level engineering functions of resolving technical issues, reviewing risk management, and interfacing IPT products. The Program Management Team reviews program status, metrics, contract actions, IIPT actions, earned value issues, and midterm planning. It also resolves final cost schedule issues.

In addition to cultural commitment invested to build the IPT process, contract award fees reinforced the procedure by including criteria that require the contractor to publish IPT agendas 24 hours before meetings and publish minutes 24 hours after meetings. This reinforces culture while enabling better communication within individual teams.

A geographically dispersed IPT structure cannot be successful without a mechanism to assist collaboration. For PM, THAAD, the Electronic Data And Management System (EDAMS) was the solution. This application is a Web-based integrated data environment that provides nationwide coverage. Application functionality does not change based on the connection. Built to support the process, EDAMS is

data-centric with minimal graphics. It provides multilevel security to limit access to nonauthorized users. Each IPT is responsible for creating its own Web site, and data are organized by how people work. These Web sites are used primarily for workflow and archiving.

EDAMS also provides a robust Executive Support System functionality, which allows management high-level information on noteworthy metrics while allowing them to "drill down" into hundreds of detailed reports. The application is extremely intuitive, allowing new team members to contribute immediately rather than having to waste precious time training. In addition to EDAMS, the PMO also uses an internal Web-based application for government-only business. Although the transition from a paper-based to electronic culture was difficult, a sensible, intuitive solution proved to ease the changeover.

A Team Of Stakeholders

In an attempt to fully use the pool of government talent, the PM ensured that stakeholders were informed and decisively engaged in all phases of the program. In one example of this resource leveraging, the PM coordinated with the Defense Contract Management Agency (DCMA) to collocate a program integrator (PI) in the PMO. This facilitated cross talk and allowed the PM to take advantage of DCMA's considerable influence. Draft Memorandums Of Understanding (MOUs) were signed between PMO directors and local DCMA commands to outline expectations. One product of these MOUs is a weekly issue list, published by the THAAD DCMA PI, outlining all nationwide THAAD-related DCMA issues. This ultimately increased the PMO's reach by providing timely visibility into subcontractor progress nationwide.

Incentivizing Contracts

One way that a customer encourages commitment and productivity from contractors is by incentivizing contracts. PM, THAAD took this concept to a new level. The award fee is based on a total 15 percent of the contract value. Award fees are earned in 6-month contract cycles. The award emphasis can shift during each 6-month cycle based on where the project is in development. Areas of emphasis are announced before the start of a new cycle and are alpha-contracted. The contractor provides self-assessments detailing progress in the emphasized areas. The government provides the contractor with midpoint and final evaluations. The midpoint evaluation promotes dialog and refocuses stakeholders. The award fee is based on the last day of the award period rather than the performance during the entire period. This encourages the contractor to strive toward documented goals for the entire award-fee period.

The THAAD Chief Engineer chairs the Award Fee Board. This process is unique because two senior contractor managers are also present as nonvoting members. The lead DCMA commander and the Army Training and Doctrine Command Systems Manager are also invited to participate on the board. Performance input is submitted to the board by every IPT. Ultimately, the PM is the determining official. What makes PM, THAAD's contract approach so novel is the scope of the award-fee emphasis and extensive collaboration with the contractor in determining and evaluating the award. The identified award-fee emphasis ranges from the fundamental importance of missiles hitting the target to encouraging the day-to-day tasks that instill program management culture. Finally, stakeholders are involved from start to finish, ultimately building a common vision.

Review/Decision Cycle

The next tenet of the THAAD philosophy is minimizing management review/decision cycle times. To accomplish this, a review cycle was developed that would allow issues to bubble up from the lowest level IPTs to a senior management decision in less than 7 days (Figure 2). A rigorous decisionmaking process drives the collaborative environment. Tuesdays through Fridays, lower level IPTs address the status of their performance and issues, passing irresolvable issues to the next highest level. Monday mornings, the PM and directors meet for a government-only "PM round table." Monday afternoons, the PM meets with contractor PMs on the Project Management Team to collaboratively review and resolve issues. Thursday, a government-only "technical round table" is held to ensure that government IPT participants are speaking to the contractor with one unified voice. This aggressive approach to resolve issues without letting them fester works for a few very important reasons. First, chartered members of these meetings must be able to speak and make decisions for their organizations. Second, the nonavailability of one key person does not stop the process; replacements are identified who have the background and authority to make decisions. Finally, an extensive teleconferencing capability makes these meetings possible from almost any hub in the PM's extensive IPT network.

Conclusion

This PM, THAAD case study shows that sensible implementation of program management best practices can revive a struggling program. But to be successful, these best practices must be integrated to enable and facilitate each other, and leadership must champion them. As with all change, initially, there may be resistance. The rank and file must be educated and motivated to adopt new ways of doing business that will ultimately improve the quality of the product for the soldier in the field. A positive environment that encourages new ideas and accepts change will ultimately prevail over the challenges of program management.

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